



Senate

General Assembly

File No. 380

February Session, 2006

Substitute Senate Bill No. 642

Senate, April 5, 2006

The Committee on Environment reported through SEN. FINCH of the 22nd Dist., Chairperson of the Committee on the part of the Senate, that the substitute bill ought to pass.

AN ACT CONCERNING CLEAN DIESEL AND BIODIESEL.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

1 Section 1. (NEW) (*Effective July 1, 2006*) (a) As used in sections 1 to 4,
2 inclusive, of this act:

3 (1) "Closed crankcase filtration system" means a system that
4 separates oil and other contaminants from the blow-by gases and
5 routes the blow-by gases into a diesel engine's intake system
6 downstream of the air filter;

7 (2) "Emergency contingency vehicle" means a bus placed in an
8 inactive contingency fleet for local emergencies, after the bus has
9 reached the end of its normal minimum useful life;

10 (3) "Full-sized school bus" means a school bus, as defined in section
11 14-275 of the general statutes, which is a Type I diesel school bus,
12 including spare buses operated by or under contract to a school
13 district, but not including emergency contingency vehicles or low

14 usage vehicles;

15 (4) "Full-sized transit bus fleet" means a fleet of diesel buses owned
16 or under contract to an operating division or a transit district, which
17 buses measure twenty-nine feet or longer in length, used to carry
18 passengers, including spare buses that meet said criteria, but not
19 including emergency contingency vehicles or low-usage vehicles;

20 (5) "Low usage vehicle" means a bus that operates for not more than
21 one thousand miles per year;

22 (6) "Model year 2007 emission standards" means on-road engine
23 emission standards promulgated by the federal Environmental
24 Protection Agency in 40 CFR Parts 69, 80 and 86;

25 (7) "Nonroad engine" means an internal combustion engine,
26 including the fuel system, (A) that is not used in a motor vehicle, (B)
27 that is used in a vehicle used solely for competition, (C) that is not
28 subject to standards promulgated under 42 USC 7411 or 42 USC 7521,
29 or (D) that is used to power generators, compressors or similar
30 equipment used in any construction program or project;

31 (8) "Operating division" means any express or local bus fleet
32 operated or contracted by a Department of Transportation Connecticut
33 Transit operating division serving the greater Hartford, New Haven,
34 or Stamford metro areas or any new division that may be added under
35 the authority of Connecticut Transit;

36 (9) "Tier 4 emission standards" means nonroad engine emission
37 standards promulgated by the federal Environmental Protection
38 Agency in 40 CFR Parts 9, 69, 80, 86, 89, 94, 1039, 1048, 1051, 1065 and
39 1068;

40 (10) "Transit district" means a provider of public transportation
41 services pursuant to section 7-273b of the general statutes;

42 (11) "Ultra low sulfur diesel fuel" means on-road diesel fuel that
43 meets the sulfur content standards promulgated by the federal

44 Environmental Agency in 40 CFR Part 80;

45 (12) "Verified alternative fuel" means an alternative fuel that has
46 been verified by the federal Environmental Protection Agency or the
47 California Air Resources Board to reduce particulate matter emissions
48 from an engine;

49 (13) "Verified emissions control device" means a device that has
50 been verified by the federal Environmental Protection Agency or the
51 California Air Resources Board to reduce particulate matter emissions
52 from an on-road engine using ultra-low sulfur diesel fuel by a given
53 amount;

54 (14) "Level 1 device" means a verified emissions control device that
55 achieves greater than or equal to twenty-five per cent, but less than
56 fifty per cent, particulate matter reduction;

57 (15) "Level 2 device" means a verified emissions control device that
58 achieves greater than or equal to fifty per cent, but less than eighty-five
59 per cent, particulate matter reduction; and

60 (16) "Level 3 device" means a verified emissions control device that
61 achieves greater than or equal to eighty-five per cent particulate matter
62 reduction or a particulate matter emission standard of 0.01 grams per
63 brake horsepower-hour.

64 Sec. 2. (NEW) (*Effective July 1, 2006*) (a) On and after September 1,
65 2008, a full-sized school bus with an engine model year of 1993 or
66 older shall not be used to transport children in the state and not later
67 than September 1, 2008, a full-sized school bus with an engine model
68 year of 2006 or older shall be operated with a closed crankcase
69 filtration system.

70 (b) Not later than September 1, 2010, full-sized school buses
71 transporting children in the state shall either (1) be equipped with a
72 level 1, level 2 or level 3 device, (2) be equipped with an engine
73 certified by the federal Environmental Protection Agency to meet
74 model year 2007 emission standards, (3) use compressed natural gas or

75 other alternative fuel verified by the federal Environmental Protection
76 Agency or the California Air Resources Board to reduce particulate
77 matter emissions by not less than twenty-five per cent compared to
78 ultra-low sulfur diesel fuel, or (4) use biodiesel fuel.

79 (c) The Commissioner of Administrative Services, in consultation
80 with the Commissioner of Environmental Protection, shall develop
81 procurement contracts for (1) the purchase of new school buses
82 compliant with model year 2007 emission standards, (2) level 1, level 2
83 and level 3 devices, (3) closed crankcase filtration systems, and (4)
84 biodiesel fuel. Said procurement contracts shall be made available to
85 municipalities and private school bus operators on the procurement
86 section of the Department of Administrative Services' Internet web
87 site, in a category that clearly identifies the product to municipalities
88 and private school bus operators.

89 (d) The Commissioner of Administrative Services, in consultation
90 with the Commissioner of Environmental Protection, shall develop an
91 outreach plan and materials for educating local and regional boards of
92 education and bus companies about the requirements of this section.

93 (e) A municipality or a private bus owner who violates the
94 provisions of this section shall pay a civil penalty of not more than five
95 thousand dollars for each offense and, in the case of a continuing
96 violation, each day's continuance thereof shall be a separate and
97 distinct offense. The Attorney General, upon complaint of the
98 Commissioner of Environmental Protection, shall institute an action in
99 superior court for the judicial district of Hartford to recover such
100 penalty. The department shall deposit penalties collected pursuant to
101 this section into the diesel risk reduction account established pursuant
102 to section 3 of this act.

103 Sec. 3. (NEW) (*Effective July 1, 2006*) There is established the "diesel
104 risk reduction account", which shall be a separate, nonlapsing account
105 within the General Fund. Penalties paid pursuant to sections 2 and 4 of
106 this act and any other state, federal or private funds directed at low
107 diesel projects shall be deposited into the account. The account may

108 contain any moneys required by law to be deposited in the account.
109 Investment earnings credited to the assets of the account shall become
110 part of the assets of the account.

111 Sec. 4. (NEW) (*Effective July 1, 2006*) (a) The Commissioner of
112 Transportation, in consultation with the Commissioner of
113 Environmental Protection and the Commissioner of Motor Vehicles,
114 shall provide incentive funds to municipalities and private school bus
115 operators from the diesel risk reduction account established pursuant
116 to section 3 of this act in accordance with the following:

117 (1) Not later than September 1, 2008, two hundred fifty dollars for
118 each closed crankcase filtration system retrofit device installed in a
119 school bus with a model year of 1994 to 2006, inclusive;

120 (2) Not later than September 1, 2010, for the installation of a verified
121 emissions control device in a school bus with a model year of 1994 to
122 2006, inclusive, (A) one thousand dollars for a level 1 device, (B) two
123 thousand dollars for a level 2 device, and (C) three thousand dollars
124 for a level 3 device.

125 (b) The Commissioner of Transportation may annually evaluate the
126 level of incentives to determine if they should be revised to foster
127 competition in the market for retrofit devices.

128 (c) To receive an incentive pursuant to this section, a municipality or
129 a private school bus owner shall submit a form prescribed by the
130 Commissioner of Transportation to the Department of Transportation,
131 which shall contain the school bus model and year, engine model and
132 year, vehicle identification number and date installed for every eligible
133 bus, and a certification that buses will operate in the state for not less
134 than four years after the date of installation of the emission control
135 device, along with a receipt for the retrofit device.

136 (d) A municipality or a private bus owner who makes a false
137 statement in an application pursuant to this section shall pay a civil
138 penalty of not more than one thousand dollars for each offense. Each

139 violation shall be a separate and distinct offense. The Attorney
140 General, upon complaint of the Commissioner of Transportation, shall
141 institute an action in superior court for the judicial district of Hartford
142 to recover such penalty. The department shall deposit penalties
143 collected pursuant to this section into the diesel risk reduction account
144 established pursuant to section 3 of this act.

145 Sec. 5. (NEW) (*Effective July 1, 2006*) The Department of
146 Environmental Protection shall provide grants from the diesel risk
147 reduction account established pursuant to section 3 of this act to
148 municipalities, identified by the department to have high levels of
149 ambient air pollution or high incidences of respiratory disease, to
150 purchase school buses (1) with a model year of 2007 or later that has a
151 level 3 device and closed crankcase filtration system installed, or (2)
152 that use an alternative fuel, including, but not limited to, natural gas,
153 provided the verified particulate matter emissions of the bus is not
154 more than 0.01 grams per brake horsepower-hour.

155 Sec. 6. (NEW) (*Effective July 1, 2006*) (a) Contractors and
156 subcontractors working on construction projects (1) on or before July 1,
157 2006, that are funded by the state in full and valued over five million
158 dollars, (2) after January 1, 2007, that are funded by the state in full,
159 and (3) after July 1, 2007, that are funded by the state by fifty per cent
160 or more shall comply with the provisions of this section.

161 (b) (1) Vehicles or equipment with on-road and nonroad diesel
162 powered engines used in the project shall use on-road grade fuel, as
163 defined by the federal Environmental Protection Agency;

164 (2) Vehicles or equipment with on-road and nonroad diesel
165 powered engines that are on the project or are assigned to the project
166 for a period of not less than thirty days with engine horsepower
167 ratings of not less than fifty horsepower shall reduce diesel particulate
168 matter emissions by at least twenty-five per cent compared to the
169 emissions from an uncontrolled engine of identical make, class and
170 model burning ultra-low sulfur diesel fuel by installing verified
171 emission control devices or using verified alternative fuels, and shall

172 not cause an increase in nitrogen oxides or other pollutants. The
173 provisions of this subdivision shall not apply to nonroad diesel
174 engines certified to Tier 4 emission standards and on-road diesel
175 engines meeting model year 2007 emission standards;

176 (3) Prior to construction, the contractor shall submit to the
177 contracting agency a certified list of the vehicles or equipment with
178 covered diesel engines that will be retrofitted with verified emission
179 control devices or that will use verified alternative fuels, which shall
180 include: (A) The equipment or vehicle number, type and make, (B) the
181 equipment or vehicle emission control device make, model and federal
182 Environmental Protection Agency, California Air Resources Board
183 verification number, (C) the type and source of fuel to be used in the
184 equipment or vehicle, and (D) the name of the contractor or
185 subcontractor using the equipment or vehicle;

186 (4) The contractor shall submit to the contracting agency monthly
187 updates of the information contained in subdivision (3) of this
188 subsection, accompanied by copies of the alternative fuel delivery slips
189 for the report time period, noting which vehicle or equipment received
190 the fuel;

191 (5) The contractor shall establish truck-staging zones for diesel
192 powered vehicles or equipment that are waiting to load or unload
193 material at the contract area. Such zones shall be located where the
194 diesel emissions from the trucks will have minimum impact on
195 abutters and the general public;

196 (6) All work shall be conducted to minimize the impact on adjacent
197 sensitive facilities including, but not limited to, hospitals, schools,
198 daycare facilities, elderly housing and convalescent facilities. Measures
199 to minimize the impact shall include, but not be limited to, locating
200 vehicles or equipment with diesel powered engines away from fresh
201 air intakes, air conditioners and windows; and

202 (7) The contractor shall submit a diesel emissions mitigation plan to
203 an engineer employed or contracted by the contracting agency prior to

204 commencing construction where work will be performed less than five
205 hundred feet away from sensitive facilities, including, but not limited
206 to, hospitals, schools, daycare facilities, elderly housing and
207 convalescent facilities. The contractor shall not commence construction
208 in said area until the engineer approves the mitigation plan. The
209 mitigation plan shall address the control of diesel emissions from all
210 diesel powered construction equipment and vehicles to be used at the
211 area.

212 (c) The contracting agency or the Department of Environmental
213 Protection shall issue a notice of noncompliance to the contractor if any
214 diesel powered construction equipment or vehicle does not comply
215 with the provisions of this section. The contractor shall have a twenty-
216 four-hour period in which to bring the equipment or vehicle into
217 compliance or to remove it from the construction project. The
218 contracting agency shall withhold payments for the work performed
219 on any item on which the nonconforming equipment or vehicle was
220 utilized for the time period during which the equipment or vehicle was
221 out of compliance.

222 (d) Any costs associated with this section shall be included in the
223 general cost of the contract.

224 (e) On January 1, 2008, and biennially thereafter, the Commissioner
225 of Environmental Protection, in consultation with other contracting
226 agencies, shall submit a report to the joint standing committee of the
227 General Assembly having cognizance of matters relating to the
228 environment on the implementation of this section and to recommend
229 any legislative changes to maximize diesel emission reductions.

230 Sec. 7. (NEW) (*Effective July 1, 2006*) (a) Not later than December 31,
231 2010, all full-sized transit buses of model year 2006 or older serving a
232 Department of Transportation Connecticut Transit operating division
233 or a transit district shall be equipped with diesel particulate filters.
234 Full-sized transit buses with Detroit Diesel Series 50 engines equipped
235 with exhaust gas recirculation are exempt from this subsection until
236 the Commissioner of Transportation determines that it is technically

237 feasible to equip such buses with diesel particulate filters.

238 (b) Not later than January 1, 2007, and annually thereafter until
239 2010, the operator of each full-sized transit bus fleet shall publicly issue
240 a reduction plan describing the number of buses to be fitted with diesel
241 particulate filters in the reporting year. Such reduction plan shall be
242 submitted to the Commissioner of Transportation.

243 (c) Not later than January 1, 2008, and annually thereafter until 2011,
244 the operator of each full-sized transit bus fleet shall submit a progress
245 report to the Commissioner of Transportation describing retrofit
246 installments to date, including, (A) the number of buses retrofitted, (B)
247 the vehicle number, type and make, and (C) the equipment or vehicle
248 emission control device make, model and federal Environmental
249 Protection Agency or California Air Resources Board Verification
250 number.

251 (d) Not later than February 1, 2008, and annually thereafter until
252 2011, the Commissioner of Transportation shall review progress
253 reports submitted pursuant to subsection (c) of this section and issue
254 an order determining each fleet's reduction plan. The Department of
255 Motor Vehicles shall not register or provide an inspection sticker for
256 any vehicle within any full-sized transit bus fleet without a showing by
257 the operator or applicant that such order indicates that fleet's
258 compliance with its reduction plan for the most recent year of
259 operation.

260 Sec. 8. Subdivision (67) of section 12-412 of the 2006 supplement to
261 the general statutes is repealed and the following is substituted in lieu
262 thereof (*Effective July 1, 2006*):

263 (67) Sales of and the storage, use or other consumption, prior to July
264 1, 2008, of a new motor vehicle which is exclusively powered by a
265 clean alternative fuel. As used in this subdivision and subdivisions (68)
266 and (69) of this section, "clean alternative fuel" shall mean natural gas,
267 hydrogen, biodiesel or electricity when used as a motor vehicle fuel or
268 propane when used as a motor vehicle fuel if such a vehicle meets the

269 federal fleet emissions standards under the federal Clean Air Act or
270 any emissions standards adopted by the Commissioner of
271 Environmental Protection as part of the state's implementation plan
272 under said act.

273 Sec. 9. Section 12-412 of the 2006 supplement to the general statutes
274 is amended by adding subdivision (117) as follows (*Effective July 1,*
275 *2006*):

276 (NEW) (117) Sales of new natural gas or diesel powered school
277 buses with model years of 2007 to 2010, inclusive.

278 Sec. 10. Section 14-26 of the general statutes is repealed and the
279 following is substituted in lieu thereof (*Effective July 1, 2006*):

280 (a) Each owner or lessee of a motor bus, service bus, taxicab, school
281 bus or motor vehicle in livery service shall file in the office of the
282 commissioner a special application, containing his name, residence
283 and post-office address and a description of the motor vehicle owned
284 or leased by him, which shall include the name of the maker and such
285 other information as the commissioner may require. The commissioner
286 may register such motor vehicle as a motor bus or as a service bus or as
287 a taxicab or as a school bus or as a motor vehicle in livery service or as
288 a school bus used in part in livery service; but no such registration
289 shall be issued to the owner or lessee of any such motor vehicle unless
290 it is in suitable condition for carrying passengers and is equipped as
291 required by law. The registration number and certificate of registration
292 of each such vehicle shall be special, and such certificate of registration
293 shall contain such information as the commissioner may require. No
294 registration shall be issued to the owner or lessee of a motor bus who
295 has not obtained a certificate of public convenience and necessity from
296 the Department of Transportation, in accordance with the provisions
297 of section 13b-80. No registration shall be issued to the owner or lessee
298 of a taxicab who has not obtained a certificate of public convenience
299 and necessity from the Department of Transportation in accordance
300 with the provisions of section 13b-97. No such vehicle shall be
301 registered unless the owner thereof has complied with the provisions

302 of section 14-29, and no such vehicle shall be operated upon any
303 highway without first being registered in accordance with the
304 provisions of section 14-49, as amended. The commissioner may issue,
305 to an applicant for registration of more than one motor bus, a
306 certificate or certificates of registration containing a general
307 distinguishing number and mark assigned to such applicant upon
308 application to him therefor, which application shall be made in such
309 form and contain such information as the commissioner may
310 determine. Each motor bus included in such registration shall be
311 regarded as registered under and having assigned to it such general
312 distinguishing number and mark. The commissioner may impose
313 upon the issuance and use of each such general registration such
314 conditions, limitations and restrictions as he may determine. Such
315 motor bus owners shall not be required to carry such certificates upon
316 the vehicles registered under the provisions of this section, but shall
317 keep a record of each person operating any motor bus so registered in
318 sufficient detail to promptly identify such person at any specified time,
319 which record shall be subject to the inspection of any officer
320 designated by the commissioner. If any such registrant fails to keep
321 such record or to produce it for inspection as hereinbefore provided,
322 such failure shall be sufficient cause for the commissioner to cancel or
323 suspend such registration. The commissioner may require of such
324 registrant a bond satisfactory to him in an amount not to exceed ten
325 thousand dollars, conditioned upon compliance with the laws of the
326 state and the regulations of the commissioner concerning the use of
327 such registration, number and mark, or otherwise conditioned as he
328 may direct, which bond shall be forfeited for any violation of the
329 conditions thereof. The commissioner may issue to the holder of any
330 such general motor bus or interstate registration one or more
331 registrations and number plates for motor vehicles in livery service
332 which may be used interchangeably with such motor bus or interstate
333 registration in accordance with such conditions and regulations as he
334 may impose, provided the number of interstate registrations and
335 number plates issued shall not exceed the number of intrastate
336 registrations and number plates authorized by the Department of

337 Transportation.

338 (b) The certificate of registration of a motor bus, service bus, taxicab,
339 school bus and motor vehicle in livery service shall, at all times, be
340 carried upon such motor vehicle and shall be subject to examination
341 upon demand by any person authorized by law.

342 (c) In order to obtain a certificate of registration pursuant to this
343 section, the owner or lessee of a school bus shall submit to the
344 commissioner documentation of compliance with the emissions control
345 requirements pursuant to section 2 of this act.

346 [(c)] (d) Any person who violates any provision of this section shall
347 have committed an infraction. Any person who violates any provision
348 of subsection (b) of this section shall be fined, for the first offense,
349 thirty-five dollars and, for each subsequent offense, not less than
350 thirty-five dollars nor more than fifty dollars.

351 Sec. 11. Section 14-164i of the general statutes is repealed and the
352 following is substituted in lieu thereof (*Effective July 1, 2006*):

353 (a) The Commissioner of Environmental Protection, in consultation
354 with the Commissioner of Motor Vehicles, shall review the technical
355 information concerning testing techniques, standards and instructions
356 for emission control features and equipment relative to diesel-powered
357 commercial motor vehicles, including such information available from
358 the United States Environmental Protection Agency and information
359 regarding standards issued by the Society of Automotive Engineers
360 and shall, not later than January 1, 1997, establish a standard of
361 minimum exhaust emission for all diesel-powered commercial motor
362 vehicles operated on the highways of this state. In establishing such
363 standard, the commissioner shall also review standards in effect in
364 other states and in regions subject to federal air quality requirements
365 and shall endeavor to maintain consistency with such standards. The
366 standard shall be reviewed by the commissioner periodically and may
367 be revised as the commissioner deems appropriate. School buses shall
368 meet the emissions standards contained in section 2 of this act. Not

369 later than July 1, 1997, the Commissioner of Motor Vehicles, in
370 consultation with the Commissioner of Environmental Protection, shall
371 select a method or methods for testing the exhaust emissions of
372 diesel-powered commercial motor vehicles and school buses.

373 (b) Not later than October 1, 1997, the Commissioner of Motor
374 Vehicles shall provide for the commencement of emissions inspections
375 of diesel-powered commercial motor vehicles and, on or after July 1,
376 2006, school buses operated on the highways of this state using the
377 method or methods selected by the commissioner under subsection (a)
378 of this section. Such inspections shall be performed in conjunction with
379 any safety or weight inspection at any official weighing area or other
380 location designated by the commissioner. In lieu of any such
381 inspection performed by the commissioner, the commissioner may
382 accept the results of an inspection performed (1) by agreement with an
383 owner or operator of a fleet of diesel-powered commercial motor
384 vehicles or school buses licensed by the commissioner pursuant to
385 subsection (h) of section 14-164c, as amended, or (2) by any licensed
386 motor vehicle dealer or repairer authorized by the commissioner,
387 pursuant to this section, to establish a diesel-powered commercial
388 motor vehicle or school bus inspection station. The Commissioner of
389 Motor Vehicles shall design a sticker to be affixed to the windshield of
390 a diesel-powered commercial motor vehicle or school bus which shall
391 bear the date of inspection.

392 (c) Any person, as defined in subsection (g) of this section, [14-164i,]
393 whose vehicle fails to pass an inspection under subsection (b) of this
394 section shall have the vehicle repaired and, within forty-five
395 consecutive calendar days, present proof of emissions-related repairs
396 of such vehicle in such form as the commissioner shall require. The
397 commissioner shall issue a two-year intrastate waiver from compliance
398 with emissions standards to any such vehicle failing to meet such
399 standards but complying with the minimum repair requirements. For
400 purposes of this section, the minimum repair requirements for diesel-
401 powered commercial motor vehicles or school buses shall be the
402 expenditure of one thousand dollars towards emissions-related repairs

403 of such vehicle. The Commissioner of Motor Vehicles shall suspend the
404 commercial registration, issued pursuant to the provisions of this
405 chapter, of any vehicle for which no proof of emissions-related repairs
406 has been submitted within such forty-five-day period.

407 (d) When a diesel-powered commercial motor vehicle or school bus
408 fails to stop and submit to an emissions inspection performed in
409 conjunction with any safety or weight inspection at any official
410 weighing area or other location designated by the commissioner, or
411 fails to comply with any provision of this section, the commissioner
412 shall (1) suspend the registration privilege to operate the vehicle on the
413 highways of the state, and (2) notify the jurisdiction in which the
414 vehicle is registered and request said jurisdiction to suspend the
415 registration of the vehicle.

416 (e) The Commissioner of Motor Vehicles shall adopt regulations in
417 accordance with the provisions of chapter 54 to implement the
418 provisions of this section.

419 (f) No diesel-powered commercial motor vehicle or school bus shall
420 be operated on the highways of this state unless such vehicle complies
421 with the provisions of this section and the regulations adopted by the
422 commissioner. Any person who operates or permits the operation of
423 any such vehicle in violation of the provisions of this section or the
424 regulations adopted by the commissioner shall be fined not more than
425 two hundred dollars for a first violation and not more than five
426 hundred dollars for a second or subsequent violation committed
427 within one year after a previous violation.

428 (g) For the purposes of this section, [(1) "commercial motor vehicle"
429 shall not be construed to include a school bus, and (2)] "person" shall
430 mean the person holding title to the vehicle or having legal right to
431 register the same, including a purchaser under a conditional bill of sale
432 and a lessee for a term of more than thirty days.

This act shall take effect as follows and shall amend the following sections:		
Section 1	<i>July 1, 2006</i>	New section
Sec. 2	<i>July 1, 2006</i>	New section
Sec. 3	<i>July 1, 2006</i>	New section
Sec. 4	<i>July 1, 2006</i>	New section
Sec. 5	<i>July 1, 2006</i>	New section
Sec. 6	<i>July 1, 2006</i>	New section
Sec. 7	<i>July 1, 2006</i>	New section
Sec. 8	<i>July 1, 2006</i>	12-412(67)
Sec. 9	<i>July 1, 2006</i>	12-412
Sec. 10	<i>July 1, 2006</i>	14-26
Sec. 11	<i>July 1, 2006</i>	14-164i

ENV *Joint Favorable Subst.*

The following fiscal impact statement and bill analysis are prepared for the benefit of members of the General Assembly, solely for the purpose of information, summarization, and explanation, and do not represent the intent of the General Assembly or either House thereof for any purpose:

OFA Fiscal Note

State Impact:

Agency Affected	Fund-Effect	FY 07 \$	FY 08 \$
Department of Environmental Protection	GF - Cost	See Below	See Below
Education, Dept.	GF - Cost	none	\$13 million
Department of Transportation	TF - Cost	See Below	See Below
Pub. Works, Dept.- Bond Funds	GF - Cost	Minimal	Minimal
Department of Revenue Services	GF/TF - Revenue Loss	See Below	See Below
Treasurer, Debt Serv.	GF- Cost	See Below	See Below

Note: GF=General Fund; TF=Transportation Fund

Municipal Impact:

Municipalities	Effect	FY 07 \$	FY 08 \$
All Municipalities	STATE MANDATE - Cost - FY 07/Revenue Gain - FY 08	\$40 million	\$13 million
Various Municipalities	STATE MANDATE - Cost	See Below	See Below

Explanation

This bill would result in an approximate cost of \$40 million to local and regional school districts and the State Department of Education due to replacing and retrofitting school buses. The estimate is based on replacing approximately 500 buses and retrofitting over 4,000 buses. Approximately one-third of the cost would be borne by the state and two-thirds by local and regional school districts. This is due to the sliding scale reimbursement of school transportation expenditures of 0% to 60% based on district wealth. It should be noted that grants for school transportation have been capped in recent years and should such practice continue a greater share of the costs would be borne by

local and regional school districts.

It should also be noted that the adoption of mandatory retrofit provisions could render Connecticut ineligible to secure federal funds under the federal Diesel Emission Reduction Act and EPA'S Clean School Bus USA program. The exact impact cannot be quantified at this time but could be significant.

The bill would require the Department of Environmental Protection (DEP) to hire 4 Environmental Analysts at a full year cost of \$240,000 in FY 07 plus fringe benefits¹ and other expenses estimated at \$50,000-\$100,000 to administer a grant program, provide enforcement/oversight for construction retrofits, and run an outreach program. The bill expands the alternative fuels exemption to include 'bio-diesel' which will result in a revenue loss of initially, less than \$500,000 but could become significant in the out years.

The FY 07 cost (full year) to the Department of Public Works (DPW) to monitor contract compliance is \$61,600 plus fringe benefits for: (1) \$56,000 in Personal Services for one Environmental Analyst (2) \$5,600 in Other Expenses for one vehicle to make field visits (\$3,600) and supplies and office equipment (\$2,000.) Since the majority of these construction projects are funded with General Obligation (GO) bonds, the contract compliance costs associated with these projects will be paid with bond funds. This increase in project costs will be reflected in increased future debt service costs to the General Fund. DPW may need additional resources to monitor contracts in the future depending on the number of state projects that require monitoring.

¹ The fringe benefit costs for state employees are budgeted centrally in the Miscellaneous Accounts administered by the Comptroller. The estimated first year fringe benefit rate as a percentage of payroll is 23.6%, effective July 1, 2005. The first year fringe benefit costs for new positions do not include pension costs. The state's pension contribution is based upon the prior year's certification by the actuary for the State Employees Retirement System (SERS). The SERS 2005-06 fringe benefit rate is 34.7%, which when combined with the non pension fringe benefit rate would total 58.3%.

The bill mandates that every transit bus, model year 2006 or older, state-owned or municipality-owned transit districts shall equip their buses with diesel particulate filters by 2010 unless otherwise exempted under provisions of the bill.

This will result in a cost to the state and municipalities in excess of \$4.5 million. The estimate for transit buses is about \$7500 per bus and there are estimated to be about 500 buses affected by the statutory change, for a grand total of about \$4.0 million, which includes another \$500,000 for early replacement of filters due to premature failure.

The bill provides that all construction projects funded by the state at 50% or more conform to the vehicle and fuel requirements after 7/1/07. This is a state mandate for towns receiving school construction reimbursements of 50% or more because it will require these towns to monitor the contractors and subcontractors on these projects. The provision will increase the cost of school building projects, which will be split between the state and municipality. This will result in an increase in future General Fund debt service payments because the state pays its portion of this grant-in-aid with GO bonds.

It is anticipated that the bills requirements for contractors and subcontractors working on state construction projects would increase costs by an estimated \$10.5 million. This is the estimate provided within the DEP's clean diesel plan for full implementation of the construction retrofits on state construction projects over \$5 million.

The bill also exempts sales of new natural gas or diesel powered school buses with model years of 2007 to 2010, inclusive, will result in a revenue loss of less than \$500,000 annually.

The bill also exempts sales of 'bio-diesel' fuel from the Motor Fuels Taxes which will result in a revenue loss to the Transportation Fund of less than \$500,000 annually initially but could be greater in the out-years as demand increases.

The Out Years

The annualized ongoing fiscal impact identified above would continue into the future subject to inflation.

OLR Bill Analysis**sSB 642*****AN ACT CONCERNING CLEAN DIESEL AND BIODIESEL.*****SUMMARY:**

This bill requires diesel-powered school buses, transit buses and construction equipment and vehicles to reduce emissions of particulate matter (soot), and requires emission testing of school buses.

Specifically, it:

1. bans the use of certain full-sized school buses, requires other school buses to be equipped with emission control devices or use alternative fuels, and imposes penalties on violators (§ 2);
2. creates a diesel risk reduction account from which the transportation commissioner must provide grants to municipalities and private school bus operators to help defray the costs of equipping the buses with emissions control devices (§ 3);
3. requires the Department of Administrative Services (DAS) to develop procurement contracts for the purchase of new school buses that meet the bill's emission reduction requirements (§ 2);
4. requires owners or lessees of school buses to submit proof of compliance with emission control requirements to register the school bus (§ 10);
5. requires certain transit buses be equipped with diesel particulate filters and their operators to submit annual progress reports to the Department of Transportation (DOT) (§ 7);
6. exempts from the sales tax, until July 1, 2008, new motor vehicles

using biodiesel fuel, and new natural gas or diesel-powered school buses for model years 2007 through 2010 (§§ 8,9);

7. requires contractors working on certain state-funded projects to (a) use on-road diesel fuel in off-road vehicles and equipment, and (b) install emissions control devices or use alternative fuels, and requires these contractors to minimize the impact of diesel emissions from trucks, vehicles and construction equipment on people nearby, the general public, and “sensitive” facilities (§ 6); and
8. requires that contracting agencies withhold payments for noncompliance with the bill’s construction vehicle and equipment requirements (§ 6).

It also makes other changes.

EFFECTIVE DATE: July 1, 2006

DIESEL-POWERED SCHOOL BUSES

§ 2—*Emissions Controls and Alternative Fuels*

The bill generally prohibits, starting September 1, 2008, full-sized school buses with engine model years of 1993 or older from transporting children. It also requires, by September 1, 2008, that full-sized school buses with engine models of 2006 or older have a closed crankcase filtration system. This is a system that separates oil and other contaminants from the blow-by gases and sends these gases into a diesel engine’s intake system downstream of the air filter.

By September 1, 2010, full sized school buses transporting children must (1) be equipped with (a) either a level 1, level 2, or level 3 emissions control device, or (b) an engine certified by the U.S. Environmental Protection Agency (EPA) to meet model year 2007 emission standards; (2) use compressed natural gas or another alternative fuel the EPA or California Air Resources Board (CARB) verifies reduces particulate matter emissions by at least 25% compared to emissions the bus would produce if it used ultra-low sulfur diesel

fuel; or (3) operate on biodiesel fuel. These provisions do not apply to buses (1) placed in an inactive contingency fleet for local emergencies, after the bus has reached the end of its normal minimum useful life, and (2) that operate for not more than 1,000 miles per year.

These provisions apply to full-sized school buses. However, other provisions of the bill, such as those concerning emissions testing, apply to all school buses.

Under the bill, a level 1 emissions control device reduces particulate matter by between 25% and 50%; a level 2 device reduces particulate matter by between 50% and 85%; and a level 3 device (1) reduces particulate matter by 85% or more, or (2) achieves a particulate matter emission standard of 0.01 grams per brake horsepower-hour.

Penalties

A municipality or private bus owner that violates these requirements must pay a civil penalty of up to \$5,000 for each offense. The attorney general, at the Department of Environmental Protection (DEP) commissioner's request, must bring an action in Hartford Superior Court to recover the penalty. In the case of a continuing violation, each day's continuance is a separate and distinct offense. The department must deposit the penalties it collects in the diesel risk reduction account the bill creates.

§ 3—DIESEL RISK REDUCTION ACCOUNT

The bill creates a diesel risk reduction account as a separate non-lapsing account in the General Fund. Penalties paid for violating the bill's provisions, and any other state, federal, or private funds directed at low diesel projects must be deposited into the account. The account may contain any money the law requires be deposited in it. Investment earnings credited to the account's assets must become part of the account.

§ 4—INCENTIVE GRANTS

The bill requires the transportation commissioner, in consultation

with the DEP and Department of Motor Vehicles (DMV) commissioner, to provide incentive grants to municipalities and private school bus operators from the account, by (1) September 1, 2008, of \$250 for installing a closed crankcase filtration system retrofit device in a 1994 through 2006 model year school bus; and (2) September 1, 2010, for the installation, in a 1994 through 2006 model year school bus (a) \$1,000 for a level 1 device, (b) \$2,000 for a level 2 device, and (c) \$3,000 for a level 3 device.

The transportation commissioner may annually evaluate the level of incentives to see if they should be revised to foster competition in the market for retrofit devices.

The DEP must provide grants from the account to municipalities it identifies as having high levels of ambient air pollution or high incidences of respiratory disease to buy (1) 2007 or later model year school buses equipped with a level 3 device and crankcase filtration system; or (2) school buses that use an alternative fuel, including natural gas, provided the bus's verified particulate matter emissions is not greater than 0.01 grams per brake horsepower-hour.

Incentive Grant Applications

Municipalities or private school bus owners applying for the incentives must submit a form prescribed by the transportation commissioner to DOT. The form must contain (1) the school bus model and year; (2) engine model and year; (3) vehicle identification number; (4) device installation date for each eligible bus, (5) a certification that buses will operate in the state for at least four years after the device is installed, and (6) a receipt for the device.

A municipality or private school bus operator that makes a false statement in an application is subject to a civil penalty of up to \$1,000 for each offense. Each violation is a separate and distinct offense. The attorney general, on the DOT commissioner's complaint, must bring an action in Hartford Superior Court to recover the penalty. Penalties must be deposited in the diesel risk reduction account.

§ 10—SCHOOL BUS REGISTRATION

The bill requires that owners or lessees of school buses to submit proof of compliance with emission control requirements to register a school bus. Failure to do so is an infraction.

§ 11—SCHOOL BUS EMISSIONS STANDARDS

Current law exempts school buses from emissions testing and requires the motor vehicle commissioner to devise a method of testing commercial motor vehicle exhaust emissions by July 1, 1997. The bill requires that he also select a method of testing school bus emissions, but does not change the July 1, 1997 deadline.

The bill requires school buses to meet the standards the bill sets out. It requires the motor vehicle commissioner, starting July 1, 2006, to provide for emissions inspections of school buses to meet those requirements. It allows him to accept the results of an inspection performed by agreement with a (1) licensed school bus fleet owner or operator or (2) licensed dealer or repairer he authorizes to establish a school bus inspection station. The commissioner must design a school bus windshield sticker bearing the inspection date.

By law, unchanged by the bill, anyone whose vehicle fails an emission inspection must present proof of emissions-related repairs within 45 consecutive calendar days. It authorizes the commissioner to issue a two-year intrastate waiver from compliance with emission standards to any vehicle that fails to meet the standards but complying with minimum repair requirements. The bill sets the minimum repair requirement for school buses at \$1,000 towards emissions-related repairs.

It authorizes the commissioner to suspend the registration of any school bus that fails to submit to an emissions inspection, and prohibits a school bus from operating on state highways unless it complies with law and regulations. Violators are subject to a \$200 fine for a first offense and up to a \$500 fine for a second and subsequent violation committed within one year of a prior violation.

§ 2—PROCUREMENT CONTRACTS

The DAS commissioner, in consultation with the DEP commissioner, must develop procurement contracts for (1) the purchase of new school buses that comply with model year 2007 emission standards; (2) level 1, level 2, and level 3 devices; (3) closed crankcase filtration systems, and (4) biodiesel fuel. DAS must make these contracts available on the procurement section of its Internet web site, in a category that clearly identifies them to municipalities and private school bus operators.

The DAS commissioner, in consultation with the DEP commissioner, must develop an outreach plan and materials to educate local and regional school boards and bus companies about the bill's requirements.

§ 7—TRANSIT BUSES

The bill requires, by December 31, 2010, all full-sized transit buses of model year 2006 or older serving a DOT Connecticut Transit operating division or transit district to be equipped with diesel particulate filters. Full-sized transit buses with Detroit Diesel Series 50 engines equipped with exhaust gas recirculation are exempt until the transportation commissioner finds it is technically feasible to equip these buses with the filters. Under the bill, a full-sized transit bus fleet is a fleet of diesel buses that each measure at least 29 feet long.

By January 1, 2007, and annually thereafter, the operator of each full-sized transit bus fleet must publicly issue, and submit to DOT, a reduction plan describing the number of buses to be fitted with diesel particulate filters in the reporting year.

By January 1, 2008, and each year afterwards until 2011, the operator of each full-sized transit bus fleet must submit a progress report to DOT describing retrofit installments to date, including (1) the number of buses retrofitted; (2) vehicle number, type; and make; and (3) equipment or vehicle emission control device make, model, and EPA or CARB verification number.

By February 1, 2008 and by that date for each year afterwards until 2011, the transportation commissioner must review these progress reports and issue an order determining each fleet's emissions reduction plan. The bill bars DMV from registering or providing an inspection sticker for any vehicle in a full-sized transit bus fleet unless the operator or applicant can show that the commissioner's order indicates the fleet complied with its reduction plan in the most recent year of operation.

§ 6—STATE-FUNDED CONSTRUCTION PROJECTS

The bill sets out requirements contractors and subcontractors working on state construction projects must meet. The requirements apply to these contractors and subcontractors as follows (1) on or before July 1, 2006, for work on projects fully-funded by the state and valued at more than \$5 million; (2) between January 2, 2007 and June 30, 2007, for work on all projects fully-funded by the state; and (3) after July 1, 2007, for work on projects funded by the state at 50% or more. But the bill does not take effect until July 1, 2006 (see COMMENT). The bill also applies to projects where work is occurring on July 1, 2006, but leaves a six month gap until the next phase begins January 2, 2007.

Any costs associated with the following requirements must be included in the general cost of the contract.

The bill requires that, as of the above dates:

1. Vehicles and equipment with on-road and non-road diesel engines use on-road grade diesel fuel, as defined by EPA (see BACKGROUND).
2. Vehicles and equipment (a) with engines of 50 horsepower or greater and (b) on the project or assigned to the project for at least 30 days must reduce particulate matter emissions by at least 25% compared to emissions from an uncontrolled engine of identical make, class, and model burning ultra-low sulfur diesel fuel. They may do so by installing emission control devices or using verified alternative fuels, and must not cause an increase

in nitrogen oxide or other pollutants. The EPA or CARB must have verified that devices or fuels reduce particulate matter emissions. Nonroad diesel engines meeting EPA Tier 4 emission standards and on-road diesel engines meeting 2007 model year emission standards are exempt from this requirement.

3. Before beginning construction, the contractor must submit to the contracting agency a certified list of the vehicles or equipment with covered diesel engines that will be retrofitted with emission control devices or use alternative fuels, verified by either EPA or CARB. The list must include the (1) equipment or vehicle number, type, or make; (2) equipment or vehicle emission control device make, model, and EPA or CARB verification number; (3) fuel type and source; and (4) name of the contractor or subcontractor using the equipment or vehicle. The contractor must submit monthly updates of this information, together with copies of the alternative fuel delivery slips for the month, noting which vehicle or equipment received the fuel.
4. The contractor must establish staging zones for trucks or equipment waiting to load or unload in the contract area. He must place the zones where truck emissions will have minimal impact on people nearby and the public.
5. All work must be conducted to minimize the impact on adjacent sensitive facilities, such as hospitals, schools, day-care facilities, elderly housing and convalescent facilities. Such measures include placing diesel powered vehicles or equipment away from air intakes, air conditioners, and windows.
6. The contractor must submit a diesel emissions mitigation plan to an engineer working for the contracting agency before beginning construction, of work is to occur within 500 feet of a hospital, school, day-care facility, elderly housing, or convalescent facility. He must not begin construction until the engineer approves the plan. The plan must address the control of diesel emissions from all equipment and vehicles used at the site.

The contracting agency or DEP must issue a notice of noncompliance if any equipment or vehicle does not comply with these requirements. The contractor has 24 hours in which to bring the equipment or vehicle into compliance or remove it from the construction project. The contracting agency must withhold payments for the work performed on any time on which the nonconforming equipment or vehicle was used for the time period in which the equipment or vehicle was not in compliance.

On January 1, 2008 and every other year afterwards, the DEP commissioner, in consultation with other contracting agencies, must report to the Environment Committee on the implementation of these requirements and recommend any legislation needed to minimize diesel emissions.

§§ 8 & 9—SALES TAX EXEMPTIONS

By law, new motor vehicles exclusively powered by clean alternative fuels are exempt from the sale tax until July 1, 2008. The bill adds biodiesel to the list of fuels that qualify as a clean alternative fuel. The vehicle must meet certain emission standards to be exempt.

The bill also exempts from the sales tax new 2007 through 2010 model year school buses powered by natural gas or diesel fuel.

BACKGROUND

Sulfur Content of Diesel Fuel

EPA requires that on-road diesel fuel have a maximum sulfur content of 15 parts per million (ppm) in 2006; it requires that off-road fuel have a maximum sulfur content of 500 ppm in 2007 and 15 ppm in 2010. EPA defines ultra-low sulfur diesel fuel to have a maximum sulfur content of 15 ppm.

COMMENT

Effect Date for Certain State Construction Projects (§ 6)

The bill applies certain requirements to contractors and subcontractors working on certain state construction projects on or

before July 1, 2006. But the bill takes effect July 1, 2006.

COMMITTEE ACTION

Environment Committee

Joint Favorable Substitute

Yea 27 Nay 0 (03/20/2006)